REMARKS

Entry of the foregoing, reexamination and further and favorable reconsideration of the subject application in light of the following remarks, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested. By the foregoing amendment, claims 54 and 64 have been canceled, without prejudice or disclaimer to the subject matter disclosed therein. Furthermore, claims 133 and 135-142 have been amended to properly recite the claims from which it was intended that they depend from. Additionally, claims 33, 42-44, 65, 71-74, 80-82, 96, 102-104, 118, 125-128, 134 and 140-142 have been amended to recite a "nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes a component that takes part in cellular processing for MHC presentation." Support for this amendment to the claims may be found, at the very least, on page 7, lines 20-28, of the specification as filed. Finally, claims 13, 30, 33, 48, 58, 83, 105, 112, 115, 128, 129 and 132 have been amended to recite that the epitope or antigen associated with impaired peptide processing fulfills "at least one of the following criteria a or b: a) recognition of said target cells by said T-lymphocytes is increased if peptide processing for MHC presentation on said target cell is decreased b) said target cells are lymphoid cells expressing b2-microglobulin and are syngenic with said T-lymphocytes." Support for this amendment to the claims may be found, at the very least, in Example 7, on page 29, lines 12-14 and 24-26, of the specification as filed. No new matter has been added by the foregoing amendment.

In the Official Action, the Examiner purports that the Amendment and Reply filed on September 18, 2000, was non-responsive to the Official Action mailed on March 16, 2000. Applicants respectfully disagree.

In response to the Examiner's statement that none of the claims added in the Amendment and Reply filed on September 18, 2000, are drawn to the elected inventions (i.e. those of original claims 1-12), applicants provide the following. Claim 13 (and claims 14-23) is drawn to the same invention as original claim 4. Claim 4 was merely re-drafted to place the subject matter claimed in proper U.S. format. Claim 24 is drawn to the same invention as original claim 12 (specifically, section (e)). Claim 48 (and claims 49-57) is drawn to the same invention as original claim 12 (specifically, sections (c) and (f)). Claim 58 (and claims 59-64) are drawn to the same invention as original claim 12 (specifically, section (c)). Claim 65 (and claims 66-73) is drawn to the same invention as original claim 11. Claim 74 (and claims 75-82) is drawn to the same invention as original claim 12 (specifically, section (d)). Claim 83 (and claims 84-104) is drawn to the same invention as original claim 12 (specifically, section (b) and (c)). Claim 105 (and claims 106-111) is drawn to the same invention as original claims 5 and 8. Claim 112 (and claims 113-114) is drawn to the same invention as original claim 6. Claim 115 (and claims 116-127) is drawn to the same invention as original claim 12 (specifically, section (b)). Claim 128 is drawn to the same invention as original claim 9. Claim 129 (and claims 130-131) is drawn to the same invention as original claims 6 and 10. Claim 132 (and claim 133) is drawn to the same invention as original claims 4 and 10. Finally, claim 134 (and claims 135-142) is drawn to the same invention as original claim 10.

Thus, all of the claims added in the Amendment and Reply filed on September 18, 2000, are drawn to elected inventions.

In response to the Examiner's purportion that the newly added claims add new matter, the applicants provide the following.

Claim 13 finds support, at the very least, at page 6, lines 25-31; page 7, lines 20-22; and page 24, lines 28-29.

Claim 14 finds support, at the very least, at page 7, lines 20-22; and page 7, line 30, to page 8, line 2.

Claim 15 finds support, at the very least, at page 20, lines 2-3 and 28-29; page 24, lines 28-31; page 29, lines 12-14; and in Table 1. Furthermore, the conclusion that can be drawn from the data described in Figure 2 is that beta-2-microglobulin is absolutely needed for recognition of the epitopes and therefore the epitope or antigen must be a molecule comprising beta-2-microglobulin (TAP/beta-2microglobulin -/- and C4425 are beta-2-microglobulin deficient variants of cells that are otherwise positive in recognition).

Claim 16 finds support, at the very least, at page 6, line 26; page 20, line 3; and page 25, lines 1-4.

Claim 17 finds support, at the very least, at page 3, lines 2-7.

Claim 18 finds support, at the very least, at page 6, lines 30-31.

Claim 19 finds support, at the very least, at page 6, line 26.

Claim 20 finds support, at the very least, at page 1, line 19.

Claim 21 finds support, at the very least, at page 6, lines 22-23.

Claim 22 finds support, at the very least, at page 1, lines 1-7.

Claim 23 finds support, at the very least, at page 14, line 29, to page 15, line 6.

Claim 24 finds support, at the very least, at page 1, lines 1-7 and 20-22.

Claim 25 finds support, at the very least, at page 7, lines 20-22.

Claim 26 finds support, at the very least, at page 1, lines 1-7.

Claim 27 finds support, at the very least, at page 1, lines 1-7, and page 15, lines 1-6.

Claim 28 finds support, at the very least, at page 1, lines 20-22.

Claim 29 finds support, at the very least, at page 9, lines 18-23.

Claim 30 finds support, at the very least, at page 6, lines 24-29.

Claim 31 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 32 finds support, at the very least, at page 6, line 26.

Claim 33 finds support, at the very least, at page 13, lines 12-18, and page 15, line 1-30.

Claim 34 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 35 finds support, at the very least, at page 4, lines 12-15.

Claim 36 finds support, at the very least, at page 6, lines 18-19.

Claim 37 finds support, at the very least, at page 8, lines 4-6.

Claim 38 finds support, at the very least, at page 6, lines 18-20.

Claim 39 finds support, at the very least, at page 7, lines 22-24.

Claim 40 finds support, at the very least, at page 8, lines 12-14.

Claim 41 finds support, at the very least, at page 8, lines 8-14.

Claim 42 finds support, at the very least, at page 8, lines 4-6 and 16-20.

Claim 43 finds support, at the very least, at page 8, lines 8-10 and 16-20.

Claim 44 finds support, at the very least, at page 8, lines 16-20.

Claim 45 finds support, at the very least, at page 9, lines 18-23.

Claim 46 finds support, at the very least, at page 12, lines 1-12.

Claim 47 finds support, at the very least, at page 12, lines 24-26.

Claim 48 finds support, at the very least, at page 13, lines 20-21 and 28-30.

Claim 49 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 50 finds support, at the very least, at page 6, line 26

Claim 51 finds support, at the very least, at page 1, lines 14-20; page 6, lines 29-31; page 7, lines 1-2; page 13, lines 20-21 and 28-30; page 14, lines 7-12; page 11, lines 10-18; and page 12, lines 19-20.

Claim 52 finds support, at the very least, at page 12, lines 19-22; and page 13, lines 20-21 and 28-30.

Claim 53 finds support, at the very least, at page 13, lines 20-21; and page 14, lines 7-9.

Claim 55 finds support, at the very least, at page 13, lines 20-21 and 28-30.

Claim 56 finds support, at the very least, at page 13, lines 20-21 and 28-30; and page 14, lines 14-17.

Claim 57 finds support, at the very least, at page 1, lines 14-20; page 6, lines 29-31; page 7, lines 1-2; page 13, lines 20-21 and 28-30; page 14, lines 7-12; page 11, lines 10-18; and page 12, lines 19-20.

Claim 58 finds support, at the very least, at page 13, lines 20-21 and 28-30.

Claim 59 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 60 finds support, at the very least, at page 13, lines 20-21 and 28-30; and page 6, line 26.

Claim 61 finds support, at the very least, at page 1, lines 14-20; page 6, lines 29-31; page 7, lines 1-2; page 13, lines 20-21 and 28-30; page 14, lines 7-12; page 11, lines 10-18; and page 12, lines 19-20.

Claim 62 finds support, at the very least, at page 13, lines 28-30.

Claim 63 finds support, at the very least, at page 14, lines 7-9.

Claim 65 finds support, at the very least, at page 13, lines 12-18.

Claim 66 finds support, at the very least, at page 13, line 15.

Claim 67 finds support, at the very least, at page 8, lines 4-6.

Claim 68 finds support, at the very least, at page 8, lines 8-10.

Claim 69 finds support, at the very least, at page 8, lines 12-14.

Claim 70 finds support, at the very least, at page 8, lines 8-14.

Claims 71-73 find support, at the very least, at page 8, lines 16-20.

Claims 74 and 76-82 find support, at the very least, at page 1, lines 1-5 and 20-22; and page 7, line 30, to page 8, line 20.

Claim 75 finds support, at the very least, at page 9, lines 18-23.

Claims 83 and 85 find support, at the very least, at page 6, lines 21-29.

Claims 84 find support, at the very least, at page 7, lines 14-18.

Claim 86 finds support, at the very least, at page 7, lines 4-18.

Claim 87 finds support, at the very least, at page 10, lines 5-7.

Claims 88 and 89 find support, at the very least, at page 10, line 9.

Claim 90 finds support, at the very least, at page 10, lines 9-10.

Claim 91 finds support, at the very least, at page 7, lines 4-18.

Claims 92 and 93 find support, at the very least, at page 10, lines 1-3.

Claim 94 finds support, at the very least, at page 20, lines 2-3 and 28-29; page 24 lines 28-31; and page 29, lines 12-14, and Table 1.

Claim 95 finds support, at the very least, at page 6, line 26; page 20, line 3; and page 25, lines 1-4.

Claims 96, 97 and 99-104 find support, at the very least, at page 9, lines 10-16.

Claim 98 finds support, at the very least, at page 8, lines 4-6.

Claim 105 finds support, at the very least, at page 1, lines 7-10.

Claim 106 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 107 finds support, at the very least, at page 6, line 26.

Claim 108 finds support, at the very least, at page 12, lines 1-12 and 19-22.

Claim 109 finds support, at the very least, at page 1, lines 12-16.

Claim 110 finds support, at the very least, at page 1, lines 7-10.

Claim 111 finds support, at the very least, on page 15.

Claim 112 finds support, at the very least, at page 1, lines 7-10.

Claim 113 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 114 finds support, at the very least, on page 15.

Claim 115 finds support, at the very least, at page 13, lines 20-27.

Claim 116 finds support, at the very least, at page 7, line 30, to page 8, line 2.

Claim 117 finds support, at the very least, at page 10, lines 9-10.

Claims 118 and 119 find support, at the very least, at page 13, lines 20-24.

Claims 120 finds support, at the very least, at page 8, lines 4-6.

Claims 121 finds support, at the very least, at page 8, lines 8-10.

Claims 122 finds support, at the very least, at page 8, lines 12-14.

Claims 123 finds support, at the very least, at page 8, lines 4-6.

Claims 124 finds support, at the very least, at page 8, lines 12-14.

Claims 125-127 find support, at the very least, at page 8, lines 16-20.

Claim 128 finds support, at the very least, at page 10, lines 18-29.

Claims 129-131 find support, at the very least, at page 9, line 25, to page 10, line 17.

Claim 132 finds support, at the very least, at page 1, lines 5-7.

Claim 133 finds support, at the very least, at page 6, line 26.

Claims 134 and 135 find support, at the very least, at page 13, lines 1-10.

Claim 136 finds support, at the very least, at page 8, lines 4-6.

Claim 137 finds support, at the very least, at page 8, lines 8-10.

Claims 138 and 139 find support, at the very least, at page 8, lines 12-14.

Claims 140-142 find support, at the very least, at page 8, lines 16-20.

Thus, these claims added in the Amendment and Reply filed on September 18, 2000, find support in the application as originally filed.

In the event that there are any questions relating to this application, it would be appreciated if the Examiner would telephone the undersigned concerning such questions so that prosecution of this application may be expedited.

Respectfully submitted,

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Attachment to Amendment and Reply Dated June 6, 2001

Marked-Up Copy of Claims

13. (Amended) An isolated epitope or antigen associated with impaired peptide processing, wherein said epitope or antigen is expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitope or antigen is recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes.

30. (Amended) A method for eliciting or stimulating immunological effector cells *in vivo* or *in vitro* against epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

said method comprising bringing said immunological effector cells in contact with epitopes or antigens associated with impaired peptide processing.

33. (Amended) A method for preparing a pharmaceutical agent or vaccine, wherein said pharmaceutical agent or vaccine can inhibit or prevent cancer growth or viral infection by stimulating immunological effector cells directed against epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

said method comprising the step of mixing an agent that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular

peptide processing for MHC presentation, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation, with a pharmaceutically acceptable carrier or diluent.

42. (Amended) The method of claim 33, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation is a nucleotide sequence which is complementary at least in part to a mRNA or DNA sequence which encodes TAP.

43. (Amended) The method of claim 33, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation is a nucleotide sequence which is complementary at least in part to mRNA or DNA sequences which encode a proteasome.

44. (Amended) The method of claim 33, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation encodes a ribozyme.

48. (Amended) A method for treating or preventing cancer or viral infections, wherein said method comprises the step of administering cells or molecules specific for epitopes or antigens associated with impaired peptide processing to a patient, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors , and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes.

58. (Amended) A method for treating or diagnosing cancer or viral infections, wherein said method comprises the steps of:

a) removing cells from a patient; and

b) treating said cells with a cell or molecule specific for epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes.

65. (Amended) A pharmaceutical composition or vaccine comprising a pharmaceutically effective dose of an agent that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular peptide processing, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation, and at least one agent that stimulates T-lymphocytes, or one nucleotide sequence which encodes an agent that stimulates T-lymphocytes, and a pharmaceutically acceptable carrier or diluent.

71. (Amended) The pharmaceutical composition or vaccine of claim 65, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes TAP.

72. (Amended) The pharmaceutical composition or vaccine of claim 65, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes a proteasome.

73. (Amended) The pharmaceutical composition or vaccine of claim 65, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation encodes a ribozyme.

74. (Amended) A method for treating or preventing cancer or viral infections, wherein said method comprises the step of administering an agent that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular peptide processing for MHC presentation, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation, in combination with at least one agent which stimulates T-lymphocytes, or one nucleotide sequence which encodes an agent that stimulates T-lymphocytes, to a patient in combination with a pharmaceutically acceptable carrier or diluent.

80. (Amended) The method of claim 74, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes TAP.

81. (Amended) The method of claim 74, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes a proteasome.

82. (Amended) The method of claim 74, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation encodes a ribozyme.

83. (Amended) A method for eliciting or stimulating immunological effector cells *in vivo* or *in vitro* against epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or

antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

said method comprising bringing said immunological effector cell in contact with a target cell which expresses on its cell surface endogenous epitopes or antigens associated with impaired peptide processing, wherein said target cell has not been contacted with external MHC binding peptides except for external MHC binding peptides which are epitopes or antigens associated with impaired peptide processing.

96. (Amended) The method of claim 83, wherein said method further comprises the step of treating the target cell with an agent that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular peptide processing for MHC presentation, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation, prior to bringing the target cell in contact with said immunological effector cells.

102. (Amended) The method of claim 96, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes TAP.

103. (Amended) The method of claim 96, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes a proteasome.

104. (Amended) The method of claim 96, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation encodes a ribozyme.

105. (Amended) A pharmaceutical composition or vaccine comprising cells or molecules specific for epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are

recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

and a pharmaceutically acceptable carrier or diluent.

112. (Amended) A pharmaceutical composition or vaccine comprising a cell which expresses on its cell surface endogenous epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and wherein at least one of the following criteria a or b is fulfilled:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

and further wherein external MHC binding peptides, other than external MHC binding peptides comprising epitopes or antigens associated with impaired peptide processing, have

not been added to said cells, in combination with a pharmaceutically acceptable carrier or diluent.

115. (Amended) A method for treating or preventing cancer or viral infection, wherein said method comprises the step of administering to a patient cells which express endogenous epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

in combination with a pharmaceutically acceptable carrier or diluent.

118. (Amended) The method of claim 115, wherein said method further comprises the steps of removing cells from a patient, treating said cells with a substance that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular peptide processing for MHC presentation, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence

which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation, before re-administering the cells to the patient.

125. (Amended) The method of claim 118, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes TAP.

126. (Amended) The method of claim 118, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes a proteasome.

127. (Amended) The method of claim 118, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation encodes a ribozyme.

128. (Amended) A method for inducing the expression on cells *in vivo* or *in vitro* of epitopes or antigens associated with impaired peptide processing, wherein said

epitopes or antigens are expressed on cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

said method comprising the step of treating said cells with an effective dose of an agent that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular peptide processing, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation, and a pharmaceutically acceptable carrier or diluent.

129. (Amended) A kit for use in a process for stimulating immunological effectors, wherein said kit comprises a cell which expresses on its cell surface endogenous epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-

lymphocytes or T-cell receptors, and wherein at least one of the following criteria a or b is fulfilled:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes;

and further wherein said cell which expresses on its cell surface endogenous epitopes or antigens associated with impaired peptide processing has not been contacted with external MHC binding peptides except for external MHC binding peptides comprising epitopes or antigens associated with impaired peptide processing.

132. (Amended) A kit for use in a process for stimulating immunological effectors, wherein said kit comprises epitopes or antigens associated with impaired peptide processing, wherein said epitopes or antigens are expressed on target cells in which cellular peptide processing for MHC presentation is impaired, wherein said epitopes or antigens are recognized by T-lymphocytes or T-cell receptors, and further [wherein] fulfilling at least one of the following criteria a or b:

a) recognition of said target cells [target cell recognition] by said T-lymphocytes [or T-cell receptors] is increased if peptide processing for MHC presentation on said target cell is decreased; or

b) said target cells are lymphoid cells expressing beta-2-microglobulin and are syngenic with said T-lymphocytes.

133. (Amended) The kit of claim [134] 132, wherein said epitope or antigen associated with impaired peptide processing is a peptide either alone or bound to an MHC class I molecule.

134. (Amended) A kit for use in a process for stimulating immunological effectors, wherein said kit comprises an agent that inhibits cellular peptide processing for MHC presentation, a nucleotide sequence which encodes an agent that inhibits cellular peptide processing for MHC presentation, or a nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation, and an agent which stimulates T-lymphocytes, or a nucleotide sequence which encodes an agent which stimulates T-lymphocytes.

135. (Amended) The kit of claim [136] 134, wherein said agent that inhibits cellular peptide processing for MHC presentation is a TAP inhibitor.

136. (Amended) The kit of claim [136] 134, wherein said TAP inhibitor is selected from the group consisting of ICP47 of HSV type 1 and IE12 of HSV type 2.

137. (Amended) The kit of claim [136] 134, wherein said agent that inhibits cellular peptide processing for MHC presentation is a proteasome inhibitor.

138. (Amended) The kit of claim [136] 134, wherein said nucleotide sequence which encodes an agent that inhibits cellular peptide processing for MHC presentation is a nucleotide sequence which encodes a TAP inhibitor.

139. (Amended) The kit of claim [136] 134, wherein said nucleotide sequence which encodes an agent that inhibits cellular peptide processing for MHC presentation is a nucleotide sequence which encodes a proteasome inhibitor.

140. (Amended) The kit of claim [136] 134, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes TAP.

141. (Amended) The kit of claim [136] 134, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular processing for MHC presentation is a nucleotide sequence which is complementary at least in part to an mRNA or DNA sequence which encodes a proteasome.

142. (Amended) The kit of claim [136] 134, wherein said nucleotide sequence that is complementary at least in part to an mRNA or DNA sequence which encodes [an agent that inhibits] a component that takes part in cellular peptide processing for MHC presentation encodes a ribozyme.